

## **ABSTRACT**

A method of modifying low frequency components of a digital audio signal having left and right channel signals, including the steps of: a) filtering the left and right channels signals using respective left and right high-pass filters to form left and right high-pass filtered signals; b) filtering the left and right channel signals using respective left and right band-pass filters to form left and right low frequency signals; c) modifying the amplitude of the left and right low frequency signals to give modified left and right low frequency signals whereby signals with amplitude  $a$  where  $0 < a < a_1$  are amplified by a first constant value  $C_1$ , signals with amplitude  $a_1 \leq a < a_2$  are amplified proportional to  $1/a$ , signals with amplitude  $a = 2a$  are unchanged, signals with amplitude  $a_2 < a < a_3$  are attenuated proportional to  $1/a$ , and signals with amplitude  $a = a_3$  are attenuated by a second constant value  $C_2$ ; and d) combining the modified band-pass filtered left and right signals with the respective left and right high-pass filtered signals to form respective modified left and right channel audio signals.